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KENYA

Agricultural Credit Review

Performance of the New Seasonal Credit Scheme

By

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Kenya
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Background

1. Not unlike many other developing countries, the Government of Kenya has used agricultural credit at subsidized rates of interest in an attempt to promote agricultural production and to improve the level and distribution of income in rural areas. Despite the high priority given to agricultural credit in an attempt to accomplish these objectives, the performance of the agricultural credit schemes and the rural financial market system has been disappointing. In this report the design, implementation and financial performance of one government credit scheme, the New Seasonal Credit Scheme (NSCS), will be examined to identify the principal reasons for the disappointing performance of this credit scheme. It will be argued that weak performance results not only from the failure of policies and institutions within the financial market system but also from the failure of policies and institutions in the marketing and input supply sectors.

2. While total lending in agriculture (credit outstanding) has increased from an estimated KShs 950 million in 1972 to an estimated KShs 4,500 million at the end of 1982, growth has slowed dramatically in the last five years and declined steadily in real terms since 1979. Of the total agricultural credit outstanding in 1983, the commercial bank share represents about 49 percent (including lending by the CBK), private non-bank financial institutions about 18 percent, Agricultural Finance Corporation (AFC) about 20 percent, and Kenya Farmers Association (KFA) about 1 percent. The New Seasonal Credit Scheme funds on lent by AFC and CBK represent an additional 13 percent, with about 95 percent of this lent by AFC and 5 percent by CBK. Interest rates on loans

and deposits are controlled by the government and have generally lagged behind the inflation rate resulting in negative real rates of interest for the entire economy and particularly for agriculture because of its preferential rates (Table 1).

Design of NSCS

3. The government introduced the NSCS in 1980 to replace the financially troubled Guaranteed Minimum Return Scheme (GMR) and to provide farmers, especially small farmers, short term credit for maize and wheat production using the crop under production as security for the loan. Since the beginning, the NSCS has suffered from many of the same problems as the GMR and has deteriorated to the point that NSCS must be redesigned if it is going to become a financially viable agricultural credit scheme. The AFC and the CBK administer the lending from NSCS with the AFC financing the large and small commercial farmers and the CBK financing the cooperative societies who on-lend to individual farmers and the unions who on-lend to other societies first and then to farmers. From a total of about KShs 930 million disbursed from NSCS to farmers since 1980, about 95 percent was disbursed through AFC and 5 percent through CBK. Since 40 to 50 percent of the amount due has not been repaid it is obvious that the most important issue facing the NSCS is loan delinquency.

4. Perhaps the major flaw in the design of NSCS is that AFC and CBK administer the lending from NSCS as agents of the government rather than as principals in the scheme. As agents of the government, AFC and CBK earn a 3 percent commission on all funds disbursed through this scheme whether or not any money is repaid. Because of this agency role and total dependence on government for NSCS funds, the AFC and CBK lack the financial and political inde-

pendence and the incentives needed for a strong performance. Since the resources for NSCS are obtained from the government through the Cereals and Sugar Finance Corporation (CSFC) any losses due to non-repayment of loans are viewed as government losses rather than as AFC or CBK losses. The high loan delinquency in combination with the operating inefficiency of AFC and CBK have resulted in very large losses from NSCS and have placed a heavy burden on the government budget. The magnitude of this problem is partially reflected in the size of the outstanding advances to AFC, CBK, KFA, and NCPB through the CSFC. As of June 30, 1983, total principal outstanding to these four institutions was about KShs 2,386.7 million.

5. All of these financial problems clearly point out that the forced interdependence of agricultural credit, marketing and input supply institutions has become a serious flaw in the design of NSCS. When the farmer borrows from AFC, buys inputs from KFA and sells the production to NCPB, a financial problem in any one institution creates a problem for all the institutions and more importantly for the farmer borrower who does not receive payment for the crop delivered to NCPB and consequently cannot pay off his AFC or CBK loan which means that KFA cannot be paid for the purchased inputs. In this situation the borrower has an overdue loan on which interest charges continue to accrue because the borrower has not received payment for the delivered crop from the government monopoly buying agent. This is an excellent example of the undesirable outcome of a well intentioned policy.

6. Although lending to small farmers has important economic and political objectives, the design of NSCS may have errored too far in that direction when the minimum size of farm eligible for financing was changed from 10 acres to 5 acres. As will be shown later in this report, the AFC has served a rather

large number of these small borrowers in spite of the difficulties associated with serving the small borrower. Among the most important of the problems of serving the small borrower are the high lending costs for the financial institution and the small marketable surplus above home consumption which the small borrower can expect to have for use in paying off the loan. This latter problem is particularly critical in maize production.

Lending Policies and Procedures

7. If one considers the fact that the preferential interest rates charged (14 percent in 1983) are less than those charged in other sectors of the economy and substantially below the rate of inflation, that no security other than the crop itself is required for a loan, that the borrower has up to one year to repay the loan, and that as little as 5 acres of wheat or maize is eligible for financing, the terms of the NSCS loans are quite generous for the successful borrower. These attractive terms force the lender to ration the very limited supply of funds among an unlimited number of potential borrowers.

8. Since the eligibility requirements are not clearly defined and vary from branch to branch, requirements such as reputation in the community, credit standing on other AFC or CBK seasonal loans or other loans, and land tenancy may be used to further ration the borrowers. Another credit rationing device of NSCS loans limits the amount of financing to a fixed amount per acre that covers a portion of the variable costs of production per acre. In recent years this has been limited to about half of the estimated variable costs of production and is generally considered inadequate by both borrowers and lenders. This rationing is also accomplished through a very costly, time consuming loan application and disbursement process. From the purchase of the loan application until loan approval and the authorization to spend against the loan, the

individual borrower will complete and sign numerous forms and documents, make several trips to the local AFC office at considerable time and expense, and wait for as long as two months before authorization to spend against the loan. Even though the AFC and CBK lend the funds for this scheme, the loan approval authority is the combined responsibility of a district loan committee consisting of the District Commissioner, representatives of MOA, AFC, CBK, NCPB, KFA, and the Area Chiefs. A major deficiency of this loan approval process is that criteria other than financial criteria may determine whether or not a particular applicatnt is approved for a loan.

9. Once the loan is approved the borrower frequently must wait a while longer before funds are available in a local bank account controlled by AFC. Rather than receive cash, the borrower must present invoices from the KFA or other input suppliers to the AFC who in turn reimburses the input supplier for purchased inputs or other services rendered. Such a loan disbursement policy is costly and time consuming for the borrower, the lender and the input supplier because the many disbusements, including several small ones, made for each loan require a great deal of time and paperwork. It is argued that such a loan disbursement policy reduces loan delinquency and the diversion of funds to other more profitable uses; however, it is also quite widely acknowledged that farmers can readily transform inputs such as fertilizer purchased through a NSCS loan into cash for use in some other more profitable activity. Even more complicated is the case of borrower who intended to produce maize or wheat with or without a loan and simply substitutes the funds borrowed for crop production for his own funds that can now be used in another activity.

10. As mentioned above, the total dependence of NSCS on government means that the size of the scheme as well as the timing of the lending process are

determined by the availability of government funds that have become increasingly more limited in the last year. This dependence has caused the size of the scheme to fluctuate substantially from year to year and also the timing of the announcement to initiate loan processing and disbursement. It is generally agreed that the timing of the announcement should be made well in advance of the major planting season in order to facilitate an orderly and efficient loan application and disbursement process for the benefit of the lender and borrower. Frequently, the announcement of the scheme is not made until much later, sometimes even as late as the start of planting, resulting in crash efforts of AFC and CBK to process loans and disburse funds and contributing to poor borrower selection. Late announcement and disbursement of NSCS funds cause farmers to postpone input purchase decisions, change management practices, or cancel loans because the crop is already planted, all of which reduce expected yields, profitability and the ability of the borrower to repay the loan.

11. The policies and procedures toward loan collection represent the weakest dimension of the NSCS and are the principal reason for the high delinquency rates. The primary responsibility for NSCS loan collection is assigned to the government monopoly marketing board, NCPB, for maize loans and to the KFA for wheat loans. When the farmer borrows seasonal credit from the AFC or CBK, he must sign an irrevocable order that legally obligates him to sell his production to NCPB or KFA. All buying locations are supposed to have a list of all the seasonal credit borrowers so that when the farmer delivers his crop to the NCPB or KFA, the buyer is supposed to deduct the amount of the loan from the value of the crop, pay this amount directly to AFC and pay the balance to the farmer. In principal, this loan collection procedure should work fine but in

practice it fails for a number of reasons. The main reason for this failure is that the NCPB has not had adequate funds to buy the crop which means that the farmer doesn't receive payment for his delivered crop, the AFC doesn't receive payment from NCPB for the farmer's loan and the KFA doesn't receive payment from the AFC for the inputs purchased by the farmer. Even if the NCPB had adequate funds the loan may not be repaid because the farmer-borrower may sell his production to a private buyer or to a neighbor non-borrower who then sells to the NCPB. In addition, with a large number of farmers and borrowers the list of borrowers may be incomplete or wrong so that correct identification of the farmer-borrower may not be possible.

12. The lack of interest in loan collection in AFC and CBK goes back to their agency role which holds that loan disbursement is their responsibility but not loan collection. Conversations with area managers, branch managers and loan officers indicate that loan collection is not a high priority activity and that very little staff time is allocated to that activity. This occurs in part because loan officers have a very heavy work load just in loan preparation leaving no time for loan collection. Another important part of this view is that any non-repayment of loans becomes a loss to the government rather than to the lending agent so that the government should worry about loan collection. In fact, the loan approval committees discussed above have been requested to conduct campaigns to encourage borrowers to pay off their overdue loans in some regions. However, these loan committees have only had limited success because it is said that many of the loan committee member have NSCS loans in arrears so that they are discredited in the eyes of the farmer-borrowers. In addition, collection of overdue AFC or CBK loans has occasionally been stopped by political interference from high levels of the government. Legally, the collection

of overdue NSCS loans must be handled by the Attorney General's office which has prosecuted a few cases but simply doesn't have the resources to handle a large number of delinquent loans each year. Legal prosecution of AFC or CBK collection of overdue loans is further constrained by the fact that no security other than the crop itself is required for an NSCS loan. In spite of all these difficulties, loan collection could be greatly improved with increased staff and time allocated to that activity as well as some lending policy and procedure changes in the NSCS.

NSCS Credit Operations

13. Since the AFC administers the vast majority of lending from NSCS, it is worthwhile to look carefully at the performance characteristics of that scheme since it began in 1980. As can be seen in Table 2, the amount disbursed by AFC through NSCS was about KShs 200 million in the 1980/81 and 1982/83 crop years and about KShs 340 million in the 1981/82 crop year. Lending for the current crop year is down significantly and is likely to be less than that for any other year because of the current cash shortage problems of the government. The inflation adjusted value of lending from NSCS has declined by over 50 percent from the 1981/82 crop year to the present time. The severity of the loan delinquency problem which has increased from over 30 percent of the amount due to over 50 percent, demonstrates that the NSCS is not a financially viable credit scheme at the present time (Table 2). The high delinquency rate is a major reason for the dramatic decline in the real value of lending from NSCS. In addition, the low nominal annual interest rates charged on NSCS loans (11 percent in the first year to 14 percent currently) result in negative real rates of interest that also contribute to the decline in the real value of lending from NSCS. As long as nominal interest rates are less than the rate

of inflation, the real value of the portfolio will decline over time even if the delinquency rate is zero percent.

14. As can be seen in Tables 3 to 6, total loan delinquency for the first three years of NSCS equals about KShs 360 million excluding all loans made for 1983/84 which were not yet due and therefore not delinquent on June 30, 1983. If one includes the amount outstanding on the loans made for 1983/84, the total principal and interest outstanding is about KShs 485 million as of June 30, 1983. Although principal arrears represent the largest single component of the delinquency problem, the interest on arrears also represents a substantial amount that may become even more important than the principal arrears because the interest on arrears will increase rapidly with time. The delinquency rate is 32 percent of the amount due for loans opened in 1980, 42 percent for loans opened in 1981, and 52 percent for loans opened in 1982. This high and increasing delinquency rate is too high for a financially viable agricultural credit scheme and higher than that for other AFC credit schemes. Of the many possible reasons for this high delinquency rate, the major reasons are defects in the credit organization and related marketing and input supply organizations, lending to non-viable farm units, and farmers who do not want to repay their loans despite their ability to repay. Income variability caused by crop failure does not appear to be nearly as important a reason for default as is commonly believed. Misallocation of borrowed funds may also be a reason for the high delinquency rate.

15. The number of loans approved has ranged from a low of about KShs 8,000 in the 1983/84 scheme to a high of nearly 19,000 in the 1981/82 scheme and the size of loan has ranged from an average of KShs 15,000 to 30,000 (Table 7). Because of the large changes in the amount disbursed and the number of loans

approved, AFC has not been able to maintain the appropriate level of staff to manage the scheme and as a result made many loans to unqualified borrowers who will never repay the loan. Although there is no firm estimate of the amount of overdue loans that can be collected, it is clear that a large number of those loans will have to be written off as bad debts.

16. Even though the minimum number of acres eligible for financing decreased from 10 acres in 1980/81 to 5 acres for every subsequent year, the average number of acres financed remained stable at about 30 acres for every year except 1982/83 when it decreased to about half that amount (Table 7). For the last three years the lending limit per acre has been fixed at KShs 1000 which means a declining amount in real terms or a level of financing that covers less than half of the variable costs of production. Both farmers and the AFC staff consider this too low to buy the recommended inputs and apply the recommended practices for optimum yields. The area financed of maize and wheat was about equal to the first year of the scheme but has increased more rapidly for wheat than for maize. While over 90 percent of the estimated wheat acreage is financed through NSCS, less than 10 percent of the maize acreage is financed through NSCS. Thus, wheat producers have been the main beneficiaries of this subsidized credit scheme.

17. The AFC branches with the largest numbers of NSCS loans are those in Kitale Eldoret, Kakamega, Kisumu, Nakuru, Nyahururu, Kimilili, Narok and Siaya. The percent distribution of the number of loans and the amount approved by region of the country shows that NSCS lending is concentrated in the North Rift and Central Rift with a little in the Western region (Table 8). NSCS lending to the North Rift has declined in the number and amount of loans from 1980 to 1983 while the number and amount of loans to the Central Rift has increased in

this same period. Since the Western region share of the number of loans is larger than the share of the amount of loans, the average size of loan has tended to be smaller in that region. The distribution of loans appears to be very consistent with the location of wheat and maize production as shown in Table 9 and 10. Over 95 percent of the wheat production is located in the Rift Valley and about 40 percent of the maize production is located there but large amounts of maize are also produced in other regions such as the Western and Eastern regions that receive little or no NSCS credit.

18. Another performance indicator of the NSCS is the distribution of the number and amount of loans by loan size (Table 11). Although this information is only available for the two most recent years, some striking changes in the distribution of this credit have already occurred. In 1980, the small loans up to KShs 10,000 in size accounted for over 70 percent of the number of loans but only 18 percent of the total amount approved, while the large loans of over KShs 50,000 accounted for less than 5 percent of the total number of loans but over 50 percent of the total amount approved. This loan distribution indicates that the AFC has approved a large number of small loans in an attempt to reach the small borrower but the small borrower has not benefitted from an equal proportion of the amount lent. This distribution of loan funds became even more concentrated in 1983 when loans up to KShs 10,000 equalled about 48 percent of the number of loans and only 12 percent of the amount approved while loans over KShs 50,000 equalled nearly 8 percent of the number of loans and 54 percent of the amount approved. In addition to the increase in the number of large loans, the number and amount of medium size loans from over KShs 10,000 to 50,000 also increased from 1982 to 1983 further contributing to the increase in the average size of loan and the concentration of loans among a relatively small number of

large borrowers. This increase in the average size of loan is readily apparent in Table 12 which shows that the average size of loan doubled from 1982 to 1983. The average size of loan for all loan size categories increased from 1982 to 1983 although the percentage increases were greatest for the loans up to KShs 5,000 and over KShs 100,000. The average size of loan for the smallest loan category was only KShs 1,765 in 1982 but increased to almost KShs 5,000 in 1983 and the largest loans increased from just over KShs 300,000 to almost KShs 387,000 in 1983. Thus, the trend toward increased average loan size and increased concentration of loans from 1982 to 1983 was quite rapid. Late announce ment of the 1983/84 NSCS lending scheme may be an important factor influencing this trend because AFC in the rush to approve loans and disburse funds may have financed the larger, better known borrowers first because more funds could be lent in a small amount of time. High delinquency rates on previous NSCS loans may have also caused AFC to improve borrower selection by concentrating lending to the borrower with more financial security, and good repayment records. In addition, political considerations may influence the distribution of loans because the large, commercial farmers may have the political power to obtain more lending for commercial agriculture. Since the time and paperwork necessary to make a loan are about the same for a large loan as for a small loan, the lending costs of AFC can be lowered by making more large loans that cost less per KShs lent than a small loan. Lending costs may become much more important in the future as tight government budgets put increased pressure on government parastatals to reduce operating losses.

Lending Costs

19. Even though AFC management and staff do not have accurate records of costs, especially by loan scheme, it is worthwhile to estimate these costs for

the NSCS to determine the average lending costs and the implications of lending costs for the profit/loss statement of AFC as well as for different size borrowers. Using the operating costs of AFC on all credit schemes of KShs 60.6 million for the 1982/83 fiscal year ending on March 31, 1983, these costs are allocated to the NSCS as proportion of the number of NSCS loans approved for all schemes to the total number of AFC loans on all schemes on March 31, 1983 (Table 13). Since the AFC had 42,429 approved NSCS loans on all schemes out of a total of 97,260 AFC loans on all schemes, the proportion of costs to be allocated to the NSCS equals 43.6 percent of KShs 60.6 or KShs 26.43 million. For purposes of comparison, a second proposed allocation of costs could be on the basis of the KShs 958 million approved amount from NSCS on all schemes to the KShs 2,092.7 million of total loans approved (including disbursements and outstanding commitments) by AFC on all schemes as of March 31, 1983 which equals a 45.8 percent cost allocation to NSCS. Since the two estimates are nearly equal, the former will be selected as the appropriate measure in this report. The KShs 26.43 million of AFC costs allocated to NSCS divided by the 42,429 NSCS loans produces an annual lending cost in 1982/83 of KShs 623 per loan. As agent for the government the AFC earns a 3 percent commission on disbursed funds; however, the above estimate of KShs 26.43 million for the NSCS is 3.7 percent of the KShs 705.5 million disbursed from NSCS by AFC which means that the AFC is losing money on the 3 percent commission allowed by the government. Since the time and paperwork involved in loanmaking varies little by size of loan, the nearly constant absolute cost per loan translates into a wide range of lending costs as a percent of the size of loan. For example, the lending cost for the average size loan of KShs 1,765 in the up to KShs 5,000 loan size category in 1982 equalled 35 percent of the amount approved which is over 10 times what AFC can earn from that loan and one should not forget that 45 percent of the loans approved in 1982 were in that size category. On a loan of KShs 14,275, the lending cost is 4.4 percent of the amount approved and on a loan of KShs 308,339 (the average size of loan in the over KShs 100,000 size category in 1982) the lending cost is only 0.2 percent of the amount approved. Thus, the average AFC lending cost under the NSCS of nearly 4 percent is heavily dependent upon the size distribution of loans which in terms of the number of loans has been oriented to the small borrower even though loans to the large borrowers are much more profitable.

20. From other studies of lending costs by agricultural development banks, the estimate of 4 percent for AFC on the NSCS is conservative and may be too low. Although the estimates of lending costs of other banks range from 3 to 10 percent depending on the term structure of the loan portfolio and the size distribution of loans, recent estimates of the lending costs for the Honduran Agricultural Development (8 percent) and the Jamaican Development Bank (11 percent) indicate that costs in similar institutions in other countries are much higher than the AFC costs for NSCS.

Future Options for NSCS

21. Major reforms are needed to improve the performance of NSCS in order to adequately serve Kenyan agriculture in the future. The options to be discussed are: (1) that AFC change from agent to principal in NSCS, (2) that KFA become the principal in NSCS, and (3) that marketing and input supply be strengthened to improve credit use and to assist small farmers.

22. As agent of the Government for NSCS, the AFC has not performed satisfactorily. By making AFC the principal for NSCS, the independence and responsibility necessary for satisfactory performance could be achieved if changes are

made in the AFC and in NSCS. To strengthen AFC's institutional capacity to effectively and efficiently operate the NSCS, the following changes in AFC are proposed:

- Upgrade the financial management of AFC through recruitment of more qualified financial and accounting staff.

- Redefine or clarify lending policies and priorities to better identify which farmers (large, medium or small) to serve.

- Strengthen efforts to collect on defaulters through increased use of legal means to collect funds.

- Streamline loanmaking and disbursement procedures to reduce time and cost of loanmaking.

- Provide AFC autonomy in loanmaking decisions to improve loan quality and the financial viability of AFC.

- Identify and write off uncollectable loans.

In addition to the above proposed changes for AFC, a number of changes are proposed for the NSCS with the AFC as principal. These changes are as follows:

- That the government assume the responsibility for any of the uncollectable loans outstanding.

- That the collectable funds be translated into a government loan to AFC to operate the NSCS as principal.

- That interest rates be increased to the new maximum of 16 percent on all new loans for next year and that positive real rates be charged thereafter.

- That a 10 acre minimum be established and that all farms below 10 acres seek financing through CBK.

- That AFC require land title as security for the loan and where land titles do not exist, the AFC must require other security.

- That AFC improve borrower selection and have sole authority for loan approval.

- That the lending limit be increased to KShs 1,500 per acre for the next crop.

- That the AFC make 10,000 loans for the 1984/85 crop and seek to increase the number of loans each year by 5 to 10 percent.

- That a distribution of loans be maintained so that the average area financed is at least 30 acres.
- That AFC staff costs will increase at a 15 percent annual rate and other costs at a 5 percent annual rate.
- That the spread or lending cost for this scheme be set at 5 percent to cover the added cost and responsibilities of the principal.
- That the delinquency rate be reduced to a maximum of 10 percent through improved borrower selection and loan collection procedures.

23. With these proposed terms and conditions, the NSCS with AFC as a principal could become a financially viable agricultural credit scheme to better serve Kenyan agriculture. Assuming 10,000 loans of KShs 60,000 per loan (KShs 2000 per acre times 30 acres), the loan portfolio would be KShs 600 million and would be sufficient with a 5 percent spread to pay the AFC estimated operating costs of slightly less than KShs 30 million for this scheme. However, this 5 percent spread does not include any provision for bad debt so that the total spread between the lending rate to farmers and the cost of funds to AFC must also cover the provision for bad debt. At the current maximum lending rate to farmers of 16 percent, a 5 percent spread plus 10 percent for bad debt would only permit the AFC to pay 1 percent for the borrowed funds. If the lending rate to farmers were increased to 20 percent, then a 5 percent spread plus 10 percent for bad debt would allow the AFC to pay 5 percent for borrowed funds which is still below current rates in Kenya. If the AFC were to pay the government current rates for borrowed funds or to borrow funds directly from the banking system, the cost of funds to AFC would be about 15 percent and with a 15 percent total spread, the lending rate to farmers would have to be 30 percent annually. Through a combination of higher interest rates, low delinquency rates and efficient lending, the NSCS with AFC as principal could become an economically viable agricultural credit scheme. Without major improvement in these three factors, the NSCS will only survive with continued government subsidies.

24. A second option that merits serious consideration and further study is that the KFA assume the responsibility for NSCS rather than AFC and CBK. Several reasons make the KFA an attractive alternative for the NSCS lending despite the fact that it is not an official government institution. The KFA is a large, modern farmer cooperative registered under the Cooperative Act that offers farm inputs supply, marketing, credit, technical assistance and accounting services and other services to nearly 8,000 members and also some services to a very large non-member clientel through a network of 42 branches located in the major farming areas of the country. Due to the high degree of complementarity among input supply, credit and marketing services, the KFA has a definite advantage over institutions that specialize in only one of those services when dealing with a client who borrows funds, buys inputs and sells output to the same KFA. Because of this relationship, the KFA not only personally knows the clients better but also has more complete information on the client. In fact, the KFA currently has a computerized accounting service for clients with detailed farm account information. The KFA has a large well trained staff to manage all the services provided. With sales of about KShs 120 million annually and profits equal to about 10 percent of sales, the KFA appears to be a financially sound institution that has consistently earned a positive return above expenses. In addition, the KFA is farmer owned and democratically controlled organization that has expressed an interest in the seasonal credit scheme.

25. At the present time, the KFA has a small seasonal credit scheme financed from its own resources. Since this scheme began in 1980, the portfolio has grown to about KShs 40 million for wheat and maize production. The interest rate on this seasonal credit is 18 percent and the delinquency rate is only 5 percent compared to a 40 to 50 percent delinquency rate on the government

seasonal credit scheme. In spite of all these advantages for conducting a successful seasonal credit scheme, the KFA suffers from one major deficiency which is that several members of the government believe that the KFA should concentrate on improving input supply rather than entering the credit business.

26. Most of the proposed terms and conditions discussed for the AFC as principal would also be required with the KFA as principal for NSCS. Other terms and conditions would have to be defined in a feasibility study of the KFA as principal. Some examples of these changes are as follows. It is quite probable that the KFA would increase the minimum size of farm eligible for financing from 10 to 15 acres so that the average size of farm and loan would be larger with the KFA as principal. Since the average size of loan would be larger and since the KFA may be a more efficient lender than AFC, the proposed 5 percent spread to cover lending costs could probably be lowered.

27. A third option to consider is to strengthen marketing and input supply services so that credit can be used more effectively. This option is based on the concept that an effective credit scheme requires an understanding of the inter-relationships between credit, marketing and input supply institutions and policies. The problems of the forced inter-relationship among AFC, NCPB and KFA and the implications for effective credit use demonstrate that reforms are needed. There are at least two general approaches to strengthen the marketing and input supply services. The most comprehensive approach requires a major change in the institutions and policies toward the marketing and input supply system. The essence of this approach is to increase private sector trading of inputs and outputs in a competitive market setting free of the government controls on prices, quantities sold, marketing margins, place of sale, etc. At the same time, the role of the financially troubled

government parastatals would be reduced to a manageable size. Rather than require farmers to sell to the NCPB, the farmer would be free to sell wherever he can get the highest price and would then be held responsible by the AFC for repayment of his loan. In addition, the farmer would be free to buy his inputs wherever the price, quality, and availability is best for whatever is needed. Many of the current problems of input supply in terms of the right amount, at the right time, in the right place, and at the right price result from excessive government interference and control. All this interference and control appears to have squeezed marketing margins and profits to the absolute minimum eliminating the incentives to invest and provide quality service. This problem is particularly severe for the small farmer who buys a few inputs, sells a little output, and lives in some remote area where no one is willing to provide him input supply and marketing services at the controlled prices and margins. A competitive market free of government price and margin controls in combination with a program of financial and technical assistance to private traders and cooperatives could greatly strengthen marketing and input supply services to all farmers and particularly to small farmers. In fact, the improvement of these services to small farmers may be more important than credit services. Due to the importance of home consumption of a subsistence crop such as maize, the estimated farm costs and returns from a small farm loan frequently indicate that the loan is not financially viable.

28. A second approach to strengthen marketing and input supply services for more effective credit use would be to work within the present structure to assist the NCPB and KFA and other cooperatives. While it is questionable whether NCPB can become an effective marketing institution, this approach would require technical and financial assistance to increase the marketing

competence and the incentives for strong performance, reduce the excessive costs of operation, and restore the financial viability of NCPB. If this could be done, farmers, the AFC and the KFA could be paid on time so that this interdependent system could function as originally designed.

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Kenya
Agricultural Credit Review
Selected Nominal and Real Interest Rates 1978-1983

Item	1978	1980	1982	1983
		- - - - Percent - - - -		
Commercial bank				
Savings deposit				
Nominal interest rates	5.0	6.0	12.5	12.5
Real interest rates[a]	-7.6	-6.8	- 3.8	- 2.5
Commercial bank				
Loans and advances (max)				
Nominal interest rates	10.0	11.0	16.0	16.0
Real interest rates	- 2.6	- 1.8	- 0.3	+ 1.0
Post Office savings				
Bank deposits				
Nominal interest	5.0	6.0	10.0	10.0
Real interest rates	- 7.6	- 6.8	- 6.3	- 5.0
Building society				
Loans (max)				
Nominal interest rates	12.0	14.0	16.0	16.0
Real interest rates	- 0.6	- 1.2	- 0.3	+ 1.0
Agricultural Finance				
Corporation seasonal				
Crop loans				
Nominal interest rates	N.A.	11.0	12.0	14.0
Real interest rates	N.A.	- 1.8	- 4.3	- 1.0

[a] Nominal interest rate less the inflation rate. The inflation rates used were 12.6 for 1978, 12.8 for 1980, 16.3 for 1982 and an estimated 15.0 for 1983.

Source: Central Bureau of Statistics, Economic Survey, 1983 and Agricultural Finance Corporation.

Kenya
Agricultural Credit Review
Agricultural Finance Corporation
New Seasonal Credit Scheme
(Kshs millions)

Status of New Seasonal Credit Scheme as of 30 June 1983	1980/81	1981/82	1982/83	1983/84
Amount disbursed	198.71	339.06	212.05	120.34
Interest charged[b/]	33.01	67.14	33.02	3.12
Total Due	231.72	406.20	245.07	123.46
Principal collected	142.11	199.68	97.16	-
Percent arrears	29%	42%	55%	-
Interest collected	16.15	37.45	20.29	-
Percent arrears	51%	45%	39%	-
Total collections	158.26	237.13	117.45	-
Percent total arrears	32%	42%	53%	-

[a/] 1983/84 season has just begun. Additional disbursements expected.

[b/] Includes interest on arrears.

Source: Agricultural Finance Corporation, MIS 805-A.

Kenya
Agricultural Credit Review
New Seasonal Credit Scheme Loans Opened in 1980

Summary of Principal Disbursed and Collected at 30 June, 1983

Item			Amount in KShs
Amount Disbursed			198,710,810.89
Less Outstandings:			
Unmatured principal	154,152.67		
Principal arrears	56,448,804.53		56,602,957.20
Principal Collected		KShs	142,107,853.69
Percentage collection on principal			71.5%

Summary of Interest Collected and Charged

Total Collections			158,257,994.57
Less Principal Collected			142,107,853.69
Total Interest Collected		KShs	16,150,140.88
Add: Interest accrued	11,893.10		
Interest arrears	2,972,001.20		
Interest on arrears	13,884,595.75		16,868,490.05
Total Interest Charged		KShs	33,018,630.93
Percentage Collection on Interest			48.9%

Summary of Above

Total Disbursement - Principal		198,710,810.89
Total Interest Charged		33,018,630.93
Total Principal and Interest Due		231,729,440.82
Less: Total Collections		158,257,994.57
Total Principal and Interest Outstanding	KShs	73,471,446.25
Precentage Collection of Principal and Interest		68.3%

Source: Agricultural Finance Corporation, MIS 805-A.

Kenya
Agricultural Credit Review
New Seasonal Credit Scheme Loans Opened in 1981

Summary of Principal Disbursed and Collected at 30 June, 1983

Items			Amounts in KShs
Total Disbursed Principal			339,060,639.30
Less: Unmatured Principal	1,658,99.55		
Principal arrears	137,715,354.60		139,374,354.15
Principal Collected		KShs	199,686,285.15
Precentage Collection on Principal			58.9%

Summary of Interest Collected and Charged

Total Collections			237,136,814.05
Less Principal Collected			199,686,285.15
Total Interest Collected		KShs	37,450,528.90
Add: Interest accrued	215,647.80		
Interest arrears	8,744,735.05		
Interest on arrears	20,736,377.65		29,696,760.50
Total Interest Charges		KShs	67,147,288.40
Percentage Collection on Interest			55.8%

Summary of Above

Total Disbursements		339,060,639.30
Total Interest Charged		67,147,288.40
Total Principal and Interest Due		406,207,927.70
Less: Total Collections		237,136,814.05
Total Principal and Interest Outstanding	KShs	169,071,113.45
Percentage Collection of Principal and Interest		58.4%

Source: Agricultural Finance Corporation, MIS 805-A.

Kenya
Agricultural Credit Review
New Seasonal Credit Scheme Loans Opened in 1982

Summary of Principal Disbursed and Collected at 30 June, 1983

Item			Amounts in KShs
Total Disbursement			212,049,334.60
Less: Unmatured Principal	1,011,845.85		114,890,162.50
Principal Collected		KShs	97,159,172.10
Percentage Collections on Principal			45.8%

Summary of Interest Collected and Charged

Total Collections			117,455,728.76
Less: Principal Collected			97,159,172.10
Total Interest Collected		KShs	20,296,556.66
Add: Interest accrued	74,973.30		
Interest arrears	8,127,973.35		
Interest on arrears	4,522,958.30		12,725,904.95
Total Interest Charged		KShs	33,022,461.51
Percentage Interest Collection			61.5%

Summary of Above

Total Disbursements		212,049,334.60
Total Interest Charged		33,022,461.51
Total Principal and Interest Due		245,071,795.11
Less: Total Collections		117,455,728.76
Total Outstanding Principal and Interest	Kshs	127,616,066.45
Percentage Collection of Principal and Interest		47.9%

Source: Agricultural Finance Corporation, MIS 805-A.

Kenya
Agricultural Credit Review
New Seasonal Credit Scheme Loans Opened in 1983

Summary of Principal Disbursed and Collected at 30 June, 1983

Item		Amount in KShs
Total Disbursed Principal		120,343,550.30
Less: Unmatured Principal	120,243,451.45	
Principal arrears	57,087.50	
		120,300,538.95
Total Principal Collected		43,011.35
Percentage collection principal		0.03%
Summary of Interest Collected and Charged		
Total Collections		155,044.05
Less Principal Collected		43,011.35
Total Interest Collected		112,032.70
Add: Interest accrued	3,008,773.90	
Interest arrears	147.80	
Interest on arrears	1,625.80	3,010,547.50
Total Interest charged		3,122,580.20
Percentage Interest Collection		3.6%
Summary of Above		
Total Disbursements		120,343,550.30
Total Interest charged		3,122,580.20
Total Principal and Interest Due		123,466,130.50
Less: Total Collections		155,044.05
Total Outstandings		123,311,086.45
Percentage Collection of Principal and Interest		0.12%

Source: Agricultural Finance Corporation, MIS 805-A
June 30, 1983

Kenya
Agricultural Credit Review
Selected Characteristics of New Seasonal Credit
Scheme Loans of the Agricultural Finance Corporation 1980/81 to 1983/84

Item	1980/81	1981/82	1982/83	1983/84[a]
Number of Loans Approved	9,504	18,950	14,161	7,785
Annual Interest Rate Charged	11%	12%	14%	14%
Average Amount of Loan Approved	24,935	21,204	15,204	30,077
Average Amount of Loan Disbursed	20,908	17,892	14,974	15,458
Amount Disbursed as a percent of Amount Approved	84%	84%	94%	51%
Average Number of Acres Financed	33.2	28.3	15.9	30.1
Minimum Number of Acres Financed	10	5	5	5
Lending Limit Per Acre	750	1,000	1,000	1,000
Lending Limit as a percent of Variable costs of Production[b]				
- Maize	55%	-	52%	49%
- Wheat	86%	-	56%	46%
Acres Financed (000):				
- Maize	155.8	232.7	177.2	-
- Wheat	166.5	284.5	236.3	-
Acres Financed as a percent of MOA estimated Planted Total Acres				
- Maize	5%	8%	6%	-
- Wheat	67%	96%	-	-

[a] The statistics presented for 1983/84 contain information through June 30, 1983 only.

[b] As estimated by Ministry of Agriculture and Agricultural Finance Corporation

Source: Agriculturel Finance Corporation and Ministry of Agriculture

Kenya
Agricultural Credit Review
Percent Distribution of the Number
and Amount of New Seasonal Credit Loans of the
Agricultural Finance Corporation by Region for 1980, 1981 and 1982

Region[a]	Percent Distribution of Number of Loans 1980	1981	1982	1983	Percent Distribution of Amount Approved 1980	1981	1982	1983
North Rift	62.0	55.0	50.0	59.0	62.0	59.0	52.0	58.0
Western	15.0	25.0	25.0	13.0	6.0	9.0	9.0	5.0
Central Rift	20.0	17.0	24.0	24.0	28.0	30.0	37.0	34.0
Mt. Kenya	3.0	2.0	2.0	2.0	3.0	2.0	2.0	2.0
Eastern	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Coast	0.0	0.0	0.2	2.0	0.0	0.0	0.0	0.0
Total[b]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[a] Nairobi is excluded from this table because the number of loans and amount approved are less than one-tenth of one percent.

[b] The total may not add to 100 percent due to rounding errors.

Source: Agricultural Finance Corporation

Table 9

Kenya

Agricultural Credit Review

Maize Production, Area Harvested and Yield by Province, 1970-82

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981 (p)	1982 (e)
AREA (000 HA)													
Rift Valley	169.9	120.8	151.4	164.9	207.1	200.9	268.2	303.3	261.5	252.9	321.4	345.4	350.1
Western	141.2	134.3	132.7	139.8	128.8	137.3	108.3	163.4	130.2	148.3	186.4	199.0	209.4
Nyanza	100.4	129.5	138.7	98.4	58.2	95.6	110.3	127.0	131.9	119.9	189.7	189.2	201.9
Central	93.6	98.5	119.2	130.5	117.4	98.1	86.4	99.6	94.3	97.8	102.7	102.6	108.6
Eastern	194.1	182.0	219.7	223.6	230.2	194.2	218.9	242.7	214.9	290.3	294.2	319.5	318.5
Coast	40.2	42.9	24.5	22.8	22.0	52.9	60.9	66.0	41.9	28.8	41.7	63.1	40.0
TOTAL	739.7	708.3	786.5	780.2	764.0	819.1	853.3	1002.2	874.9	954.5	1120.0	1218.9	1228.5
PRODUCTION (000 MT)													
Rift Valley	336.7	305.5	382.5	376.7	577.8	799.9	733.4	808.8	785.8	642.4	699.1	993.5	-
Western	391.4	362.8	239.0	251.8	231.9	370.7	292.4	441.2	175.8	260.4	335.5	477.7	-
Nyanza	93.1	291.4	249.6	177.1	106.6	136.5	267.6	328.5	263.3	250.9	389.9	437.7	-
Central	126.3	205.0	253.5	179.9	221.4	227.5	233.5	233.3	206.8	171.1	188.4	282.5	-
Eastern	124.7	262.1	237.3	290.8	248.6	96.1	139.2	196.4	273.2	253.0	136.4	280.0	-
Coast	36.2	46.3	22.0	20.5	28.0	57.1	81.9	71.3	34.2	25.9	18.0	113.6	-
TOTAL	1180.7	1473.3	1384.1	1297.1	1386.5	1688.0	1748.2	2079.8	173.9	1603.9	1767.5	2585.0	2371.5
YIELD (MT)													
Rift Valley	2.11	2.53	2.53	2.28	2.79	3.32	2.73	2.67	3.00	2.51	2.18	2.86	-
Western	2.77	2.70	1.80	1.80	1.80	2.70	2.70	2.70	1.35	1.76	1.80	2.40	-
Nyanza	0.93	2.25	1.80	1.80	1.83	1.43	2.42	2.59	2.00	2.09	2.05	2.31	-
Central	1.35	2.08	2.13	1.38	1.89	2.32	2.70	2.34	2.19	1.75	1.84	2.75	-
Eastern	0.64	1.44	1.08	1.30	1.08	0.50	0.64	0.81	1.27	0.87	0.46	0.88	-
Coast	0.90	1.08	0.90	0.90	1.27	1.08	1.34	1.08	0.82	0.90	0.43	1.80	
TOTAL	1.60	2.08	1.76	1.66	1.85	2.06	2.05	2.08	1.99	1.68	1.58	2.12	1.97

(e) Estimated
(p) Provisional

Source: Ministry of Agriculture

Table 10

Kenya

Agricultural Credit Review

Wheat Production, Area Harvested and Yield by Province, 1970-81

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Area (HA)												
Rift Valley	99804	90915	81730	97300	88295	111170	124340	117790	86608	73489	90641	107134
Central	17269	15732	13289	8914	9580	10820	8768	13338	8346	3782	6785	7035
Eastern	979	680	1741	6868	6950	7260	7250	8444	10760	8500	7640	5200
Total	118052	107327	96760	113082	104825	129250	140338	139572	105714	85771	99724	118840
Production (MT)												
Rift Valley	142964	-	130850	154707	136344	166521	185281	143721	114553	93943	174993	211529
Central	24867	-	14352	9882	16966	11467	12089	17331	16268	2968	11352	12663
Eastern	1397	927	3684	15300	14500	14503	15500	24531	14293	4250	8595	11700
Total	169228	158800	148886	179889	167810	192491	212870	185583	145114	101116	184290	235529
Yield (MT)												
Rift Valley	1.43	-	1.60	1.59	1.54	1.50	1.49	1.22	1.32	1.28	1.93	1.97
Central	1.44	-	1.08	1.11	1.77	1.06	1.38	1.30	1.95	0.78	1.67	1.80
Eastern	1.43	0.73	2.12	2.23	2.09	2.00	2.14	2.91	1.33	0.50	1.13	2.25
Total	1.43	-	1.54	1.59	1.60	1.49	1.52	1.33	1.37	1.18	1.85	1.98

Source : Ministry of Agriculture.

Table 11

Kenya
Agricultural Credit Review
Percent Distribution of the Number
and Amount of New Seasonal Credit Loans of the
Agricultural Finance Corporation by Size of Loan for 1982 and 1983

Size of Loan in Kshs	Percent Distribution of Number of Loans 1982	Number of Loans 1983	Amount Approved 1982	Amount Approved 1983
Up to 5,000	44.8	15.5	5.1	2.5
5,001 to 10,000	25.8	32.2	12.6	9.4
10,001 to 20,000	16.8	28.3	15.6	15.2
20,001 to 50,000	8.2	16.2	16.4	18.3
50,001 to 100,000	2.5	4.4	11.5	11.1
Over 100,000	1.9	3.4	38.8	43.5
Total	100.0	100.0	100.0	100.0

Source: Agricultural Finance Corporation

Kenya
Agricultural Credit Review
Average Size of New Seasonal Credit Loans
of the Agricultural Finance Corporation by
Size of Loan for 1982 and 1983

Size of Loan in Kshs	Average Size of Loan in Kshs	
	1982	1983
Up to 5,000	1,765	4,738
5,001 to 10,000	7,523	8,774
10,001 to 20,000	14,275	16,166
20,001 to 50,000	31,074	34,067
50,001 to 100,000	71,801	76,161
Over 100,000	308,339	386,943
All loans	15,366	30,047

Source: Agricultural Finance Corporation

Kenya
Agricultural Credit Review
Estimated Agricultural Finance Corporation
Lending Costs for the New Seasonal Credit Scheme

Operating Costs of AFC for 1982/83
Based on the Unaudited Annual Report on 31 March, 1983

Item	Amount in Millions	
Staff Cost	Kshs	30.7
General Administration		27.1
Depreciation		2.5
Board Member Fees		0.3
AFC Total Lending Costs	Kshs	60.6 million
Estimated AFC Lending Costs For NSCS[a]	Kshs	26.43 million

[a] AFC lending costs for NSCS are estimated as 43.6% of total AFC lending costs which equals the number of NSCS approved loans on all schemes on March 31, 1983 (42,429) divided by the total number of AFC loans on all schemes (97,260) on that same date.